

MEDVEDEV, Ye.S.

Regional agricultural administrations should be provided with reliable communication services. Vest. svyazi 22 no.7:1-3 J1 '62.

(MIRA 15:7)

1. Zamestitel' ministra svyazi RSFSR.
(Agricultural administration) (Telecommunication)

BARK, S.Ye.; KUVSHINNIKOV, V.M.; MARTYNOVSKIY, D.M.; MEDVEDEV, Ye.V.;
SEVORTSOVA, M.I.; USTINOV, V.A.

Multijet burners with individual mixers and a gas cooled crater.
Gaz. prom. 4 no.2:17-23 F '59. (MIRA 12:3)
(Gas burners)

MEDVEDEV, Yefim Vasil'yevich, kand.filosof.nauk, polkovnik; MILOVIDOV,
Arseniy Stepanovich, kand.filosof.nauk, podpolkovnik; SLEDNEV,
I.P., polkovnik, red.; KRASAVINA, A.M., tekhn.red.

[Role of the masses in present-day wars] Rol' narodnykh mass v
sovremennykh voynakh. Moskva, Voen.izd-vo M-va obor.SSSR, 1964.
83 p. (MIRA 13:10)

(War)

34015

S/025/62/000/003/001/001

D298/D303

9.2574 (1055, 1158, 1163)

AUTHOR: Medvedev, Yul.

TITLE: 15,000,000 lumens of electric sunlight

PERIODICAL: Nauka i zhizn', no. 3, 1962, 24-32

TEXT: The article describes the novel features of the three-stage 300-kw ballastless "Sirius" lamp exhibited in the "Machine Construction" pavilion of the exhibition of the Achievements of the National Economy in Moscow. I.S. Marshak, scientific director of a laboratory at the Moskovskiy elektrolampovyy zavod (Moscow Electric Lamps Plant) determined the resistance inside the tube needed for a quasi-stationary saturated discharge to ensure in a pulse lamp. In this case the current will be a limiting, and therefore constant, current -- the prerequisite for a gas-discharge lamp without ballast. After research to turn the light pulses into continuous glow the plant's laboratory designed a 20-kw gas-discharge lamp without ballast in 1959. This was followed by the 300-kw "Sirius" lamp, designed under Marshak's direction by a team consisting of: Engineer V.I. Vasil'yev, Chief Designer; N.V. Rogatin, a quartz arc technologist; A.L.

Card 1/2

15,000,000 lumens of ...

S/025/62/000/003/001/001
D298/D303

Vasserman, who directed work on the unique starter. Each 100-kw section of the lamp emits 5,000,000 lumens. The special starter for the lamp consists of a high-voltage, step-up pulse transfer giving 2,000 pulses a second at 20,000 v. A time relay cuts the transformer after one second, when the lamp begins to work directly from the grid. The temperature at the center of the plasma channel reaches 8,000°C. The "Sirius" produces the brightest artificial light in the world and also approximates most closely to the color spectrum of natural sunlight. It is also the most economical converter of electricity into light; its light output varies directly with the temperature of the emitting body. "Sirius" has an efficiency of 50 lumens/watt. The tubes of the "Sirius" lamp have water jackets for cooling. There are 7 figures.

Card 2/2

MEDVEDEV, YU. [Medvedev, Yu.] (Alma-Ata)

The flame system. Nauka i tekhn mladezh 16 no.10:2-11 '64.

ABDULIN, A.; ALEKSEYEV, I.; BANTLE, O.; BOBROV, L.; BOZHANOV, B.;
 BOYKO, V.; BONDAREV, K.; BORZOV, V.; VERKHOVSKIY, N.; GUBAREV, V.;
 GUSHCHEV, S.; DEBABOV, V.; DIKS, R.; DMITRIYEV, A.; ZHIGAREV, A.;
 ZEL'DOVICH, Ya.; ZUBKOV, B.; IRININ, A.; IORDANSKIY, A.;
 KITAYGORODSKIY, P.; KLYUYEV, Ye.; KLYACHKO, V.; KOVALEVSKIY, V.;
 KNORRE, Ye.; KONSTANTINOVSKIY, M.; LADIN, V.; LITVIN-SEDOY, M.;
 MALEVANCHIK, B.; MANICHEV, G.; MEDVEDEV, Yu.; MEL'NIKOV, I.;
 MUSLIN, Ye.; NATARIUS Ya.; NEYFAKH, A.; NIKOLAYEV, G.; NOVOMEYSKIY, A.;
 OL'SHANSKIY, N.; OS'MIN, S.; FODOL'NYY, R.; RAKHMANOV, N.; REPIN, L.;
 RESHETOV, Yu.; RYBCHINSKIY, Yu.; SVOREN', R.; SIFOROV, V.; SOKOL'SKIY, A.;
 SPITSYN, V.; TEREKHOV, V.; TEPOV, L.; KHAR'KOVSKIY, A.; CHERNYAYEV, I.;
 SHAROL', L.; SHIBANOV, A.; SHIBNEV, V.; SHUYKIN, N.; SHCHUKIN, O.;
 EL'SHANSKIY, I.; YUR'YEV, A.; IVANOV, N.; LIVANOV, A.; FEDCHENKO, V.;
 DANIN, D., red.

[Eureka] Evrika. Moskva, Molodaia gvardiia, 1964. 278 p.
 (MIRA 18:3)

VASIL'YEV, G.A.; MEDVEDEV, Yu.A.; PROZOROVSKIY, V.B.; MELTYKHINA, I.V.

Effect of acclimatization to hypoxia on the growth and radiosensitivity of rat lymphosarcoma. Med. rad. 10 no.2:35-40 F '65.

(MIRA 18:6)

1. Kurs farmakologii (zav. V.B. Prozorovskiy) pri kafedre patofiziologii i farmakologii (zav. - prof. J.P. Senderikina) Ietro-zavodskogo gosudarstvennogo universiteta.

KANYUGA, A.P.; MEDVEDEV, Yu.A.

Simplified integral method for processing the bottom pressure build-up curves. Nauch.-tekhn. stor. po dob. neriti no.24:113-117 '64.
(MIRA 17:10)

1. SERVMIG.I.

MEDVEDEV, Yu.A.; VASIL'YEV, G.A.; BELYAYEV, V.A.

Increase in oxygen requirement during irradiation of a nonspecific
reaction realized through the adrenal cortex. Radiobiologia 5
no.1:149-150 '65. (MIRA 18:3)

BREVDO, G.V.; MEDVEDEV, Yu.A.

Pathogenesis and the pathogenetic method of preventing and treating inflammatory infiltrates forming at the site of intramuscular injections of an aminazine solution. Zhur. nevr. i psikh. 62 no.2:216-218 '62. (MIRA 15:6)

1. Kafedra psikhiiatrii (zav. - prof. S.S. Mnukhin) Leningradskogo pediatricheskogo instituta, 3-ya Leningradskaya psikhonevrologicheskaya bol'nitsa imeni Skvortsova-Stepanova (glavnyy vrach N.D. Bulkin).

(CHLORPROMAZINE--TOXICOLOGY)
(INJECTIONS, INTRAMUSCULAR) (INFLAMMATION)

MEDVEDEV, Yu.A., kand.med.nauk; MEDVEDEVA, T.Ye.

Congenital fibroelastosis of the heart. Kaz. med. zhur. no.6:52-54
N-D '61. (MIRA 15:2)

1. Kafedra patologicheskoy anatomii (zav. - dotsent A.V.Sosunov);
kafedra akusherstva i ginekologii (zav. - prof. S.G.Yur'yevskiy)
Chitinskogo meditsinskogo instituta i Chitinskiy gorodskoy roditel'skiy
dom (glavnyy vrach - L.Ye. Dubovaya).
(HEART_DISEASES)

MEDVEDEV, Yuliy Emmanuilovich; CHARNY, A.Kh., nauchn. red.;
KUPRIYANOV, V.A., nauchn. red.; SOKOLOV, O.I., red.;
ATROSHCHENKO, L.Ye., tekhn. red.

[The path of metallurgy] Puti metallurgii. Moskva, Izd-
vo "Znanie," 1963. 46 p. (Novoe v zhizni, nauke, tekhnike.
IV Seriya: Tekhnika, no.17) (MIRA 16:10)
(Metallurgy)

ZUBKOV, Boris Vasil'yevich; MEDVEDEV, Yuliy Emmanuilovich;
MUSLIN, Yevgeniy Salimovich; CHERNIKOVA, M.S., red.;
KLAPTSOVA, T.F., tekhn. red.

[A hundred inventions] Sto izobretenii. Moskva, Sovetskaia
Rossia, 1963. 295 p. (MIRA 17:1)

MEDVEDEV, Yu. A., Candidate of Med Sci (diss) -- "Leucocyte infiltration of the mucosa of the gastrointestinal tract in fasting and digestion (Histo-physiological investigation on cats)". Leningrad, 1958. 21 pp (Leningrad pediatric Med Inst), 250 copies (KL, No 20, 1959, 116)

VOLKOVA, M.A.; BELYAKOV, V.A.; MEDVEDEV, Yu.A.

Distribution of depth doses from the telegamma apparatus with
Cs¹³⁷. Med.rad. no.5:82-86 '61. (MIRA 14:11)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo onkologicheskogo
instituta imeni P.A. Gertsena.
(CESIUM--ISOTOPES) (GAMMA RAYS--THERAPEUTIC USE)

MEDVEDEV, Yu.A. (Khabarovsk); P'YANKOV, V. (Khabarovsk); KURCHALOVA, S.
(Khabarovsk)

Observation of partial lunar eclipse of March 2, 1961.

Astron.tsir. no.220:8-9 Apr '61. (IR. 14:1)

(Eclipses, Lunar--1961)

ACCESSION NR: AP4040313

S/0057/64/034/006/1083/1085

AUTHOR: Medvedev, Yu. A.

TITLE: Radio wave scattering in the air by a point source or radiation with a long mean free path

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 34, no. 6, 1964, 1083-1085

TOPIC TAGS: radiowave scattering, ionosphere, ionospheric scattering, solar corona, ionization, gamma radiation, radiation point source, capture scattering

ABSTRACT: This article deals with the ionization of air by a point source of gamma radiation and the subsequent scattering of radio waves by the steadily increasing ionization region. This region acts as a "collector" and deflects the radio waves toward its center along a spiral trajectory. The equation of trajectory and the probability of radio wave capture are derived. The intensity of scattered radiation can be determined as the integral along the

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ACCESSION NR: AP4040313

corresponding trajectory, with respect to the refractive index.
"The author thanks B. M. Stepanov for his interest in and evaluation
of this work". Orig. art. has: 4 formulas.

ASSOCIATION: none

SUBMITTED: 15Jul63

DATE ACQ: 19Jun64

ENCL: 00

SUB CODE: ES, NP

NO REF SOV: 003

OTHER: 001

Card 2/2

L 16909-65 EWT(1)/EWG(v)/FCC/EWA(d)/EEC-L/EEC(t) Pe-5/Pae-2 SSD(a)/SSD/
AFWL/ESD(t) GW

ACCESSION NR: AP5001234

S/0033/64/041/006/1118/1127

AUTHOR: Ivanov, V. V.; Medvedev, Yu. A.

TITLE: The magnetic effect and shock wave of a meteor ¹²

SOURCE: Astronomicheskiy zhurnal, v. 41, no. 6, 1964, 1118-1127

TOPIC TAGS: upper atmosphere, electromotive force generating mechanism, isothermal discontinuity, wave width, meteor trail

ABSTRACT: The shock wave of a meteor is studied on the basis of its Mach number and aerodynamics. The state of the gas is determined by the velocity of the shock wave and the thermodynamic states on both sides of the front. The isothermal jump on both sides of the front is determined while taking the conservation of impulse and the viscosity into account. The ionization density per unit length of the path depends on the size of the body and the concentration of molecules in the medium. The medium in the path of the isothermal jump is totally ionized. Two ambipolar electromotive forces are found in the isothermal jump, one in the jump and the other at the ionization front. The magnetic field of the meteor trail is determined by the electric current within the trail. Orig. art. has: 3 figures and 15 formulas.

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L 16909-65

ACCESSION NR: AP5001234

ASSOCIATION: none

SUBMITTED: 30Jan64

ENCL: 00

SUB CODE: AA

NO REF SOV: 011

OTHER: 002

ATD PRESS: 3150

Card 2/2

L 22987-65

ACCESSION NR: AP5002317

8/0141/64/007/005/0865/0871

AUTHOR: Medvedev, Yu. A.; Protsenko, K. D.; Stepanov, B. M.

TITLE: Probability distribution of the time position of the signal threshold point at a detector output in the presence of noise

SOURCE: IVUZ. Radiofizika, v. 7, no. 5, 1964, 865-871

TOPIC TAGS: probability distribution, threshold signal, detector output, signal to noise ratio

ABSTRACT: A system is considered, consisting of a zero-lag detector and a narrow-band filter with a spectral characteristic that is symmetrical about the center frequency. The sinusoidal input signal is modulated by a slowly-varying smooth function. The authors analyze the output produced by this signal in conjunction with Gaussian noise at the input. Non-stationary processes in the detector itself are neglected. The fluctuations are assumed to be small, and the distribution function is investigated to estimate the mean square deviation of the time position of the threshold point at the detector output, defined as the

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L 22987-65
ACCESSION NR: AP5002317

time when the envelope of the voltage passes through a fixed level. This problem is similar to one considered earlier by V. I. Tikhonov (Vestnik MGU v. 5, 31, 1956) as applied to an electronic relay. It is shown that the probability of a given value of the time constant is decreasing with increasing signal/noise ratio. "The authors thank Yu. S. Sayasov for useful remarks." Orig. art. has: 2 figures and 19 formulas.

ASSOCIATION: None

SUBMITTED: 21Set63

EXCL: 00

SUB CODE: EC

NR REF SOV: 003

OTHER: 002

Gr 1 2/2

L 1864-66 EWT(1)/ECC/EWA(d) GW

ACC NR: AP5010271

UR/0203/65/005/002/0284/0288

AUTHOR: Ivanova, V. V.; Medvedev, Yu. A.TITLE: Electrical effects of a large meteorite^{12, 44, 55}

SOURCE: Geomagnetizm i aeronomiya, v. 5, no. 2, 1965, 284-288

TOPIC TAGS: meteorite, shock wave, astrophysics, lower atmosphere, atmospheric physics, electric effect, atmospheric electricity^{12, 44, 55}

ABSTRACT: Some of the electrical effects associated with the passage of a meteorite through the lower atmosphere (egs., polarization of the air region in the terrestrial electric field traversed by the ionized body, the form of the shock wave generated by the meteorite, the length of the high-temperature trail, and the electrical conductivity of the air) are examined. It is found that the gas entering into a shock wave having a less than critical radius assumes a conductivity great enough to supplant the electric field. The form of the shock wave of the meteoric body is determined by the formula $z = AR \sup 2$, where $A \approx 0.98/d$, d is the size of the body, z and R are the cylindrical coordinates with axis z directed along the axis of the trail, and with an origin connected with the meteoric body. The values characterizing the gas in the coordinate system do not depend on time, and the formulas for convective heat transfer coincide with the condition that the temperature is constant along the current lines. It is found that in the case where $z < z_{\text{sub crit}}$ the polarized region is delimited by the front of the shock wave, while in the case where $z > z_{\text{sub crit}}$ it is delineated by the current lines flowing from the frontal line determined by

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ACC NR: AP5010271

the equations $R = R_{\text{sub crit}}$ and $z = z_{\text{sub crit}}$. Orig. art. has 1 figure and 15 formulas.

ASSOCIATION: none

SUBMITTED: 06Apr64

ENCL: 00

SUB CODE: ES, AA

NO REF SOV: 008

OTHER: 000

Card

2/2

ACC NR: AR6020759

SOURCE CODE: UR/0269/66/000/003/0029/0029

AUTHOR: Karetnikov, V. G.; Medvedev, Yu. A.

TITLE: Electrophotometric observation of DY Pegasi

SOURCE: Ref. zh. Astronomiya, Abs. 3.51.248

REF SOURCE: Peremenenyye zvezdy, v. 15, no. 3, 1964, 268-277

TOPIC TAGS: variable star, photometric analysis, telescope, optic brightness

ABSTRACT: The photoelectric observations of DY Pegasi were conducted from July to October 1963, using the 8-inch refracting telescope of the Odessa Observatory. Two hundred and fifteen brightness evaluations were made. The comparison stars were BD+16°4878 and BD+16°4876. Ten maxima were determined, and a correlation was discovered between the width of the maxima and the brightness of variable stars at the maxima. Variations of the parameters of the brightness curve (the altitude of the maximum, the depth of the minimum, the M-m, and the shape of the brightness curve) which underwent appreciable changes, were studied. Brightness graphs corrected for the atmospheric absorption are given. The change of brightness at the maximum was greater than at the minimum. The value of the secondary period was refined to $P = 0^d.255413$. Bibliography of 5 titles. N. Perova. Translation of abstract

SUB CODE: 03

Card 1/1

UDC: 523.841.3

ACC NR: AR6020759

SOURCE CODE: UR/0269/66/000/003/0029/0029

AUTHOR: Karetnikov, V. G.; Medvedev, Yu. A.TITLE: Electrophotometric observation of DY Pegasi

SOURCE: Ref. zh. Astronomiya, Abs. 3.51.248

REF SOURCE: Peremenenyye zvezdy, v. 15, no. 3, 1964, 268-277

TOPIC TAGS: variable star, photometric analysis, telescope, optic brightness

ABSTRACT: The photoelectric observations of DY Pegasi were conducted from July to October 1963, using the 8-inch refracting telescope of the Odesa Observatory. Two hundred and fifteen brightness evaluations were made. The comparison stars were BD+16°4878 and BD+16°4876. Ten maxima were determined, and a correlation was discovered between the width of the maxima and the brightness of variable stars at the maxima. Variations of the parameters of the brightness curve (the altitude of the maximum, the depth of the minimum, the M-m, and the shape of the brightness curve) which underwent appreciable changes, were studied. Brightness graphs corrected for the atmospheric absorption are given. The change of brightness at the maximum was greater than at the minimum. The value of the secondary period was refined to $P = 0^d.255413$. Bibliography of 5 titles. N. Perova. Translation of abstract

SUB CODE: 03

Card 1/1

UDC: 523.841.3

L 44314-66 EXT(1) SCTB DD

ACC NR: AP6029426

SOURCE CODE: UR/0205/66/006/004/0618/0619

AUTHOR: Vasil'yev, G. A.; Medvedev, Yu. A.

ORG: State Institute for the Advanced Training of Physicians im. S. M. Kirov,
Leningrad (Gosudarstvennyy institut usovershenstvovaniya vrachey)

TITLE: The role of the adrenal cortex in increasing resistance of x-ray irradiated
white mice to acute hypoxia

SOURCE: Radiobiologiya, v. 6, no. 4, 1966, 618-619

TOPIC TAGS: hypoxia, x ray radiation biologic effect, adrenal gland, radiation
tolerance, *mouse*

ABSTRACT: The effect of x-ray irradiation on resistance to acute (anoxic, anemic, and histotoxic) hypoxia was studied in experiments on white mice irradiated with doses of 50, 100, 200, 500, 700, and 1000 r and observed 3 hr, and 1, 2, 3, 5, 6, and 10 days after irradiation. The content and distribution of sudanophilic and anisotropic lipids in the adrenal cortex, and the weight coefficient and size of the adrenals of 50 irradiated mice were determined. Results on the survival of irradiated animals are presented in Table 1. Resistance to acute anoxic hypoxia was increased by doses from 200 to 700 r; the increase was observed by the third hr after 700-r irradiation and lasted 50 days. Resistance to CO and potassium cyanide was also significantly increased by the 700-r dose. Smaller (50- and 100-r) and larger (1000-r) doses gave

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UDC: 612.014.48

L 44314-66

ACC NR: AP6029426

Table 1. The effect of x-ray irradiation on survival of white mice in conditions of general hypoxia.

Experimental conditions	Experimental Group		Control Group	
	Survived	Died	Survived	Died
Pressure chamber exposures for 10--12 min at an ambient pressure of 120 mm Hg, beginning 3 hr after 700-r irradiation (29)	17	12	8	21
	26			
The same after 1 day (47)	26	16	13	29
2 days (40)	14	26	8	32
5 days (23)	14	11	10	15
6 days (25)	9	16	11	14
10 days (24)	4	20	8	16
Pressure chamber exposures 1 day after 50-r irradiation (15)	5	10	6	9
100 r (20)	8	12	10	10
200 r (20)	11	9	7	13
500 r (25)	14	11	8	17
1000 r (15)	4	11	5	10
Exposure to CO (8 mm/l for 40 min 1 day after 700-r irradiation (20)	15	5	9	11
Potassium cyanide injection (5 mg (5 mg/kg subcutaneously), 1 day after 700-r irradiation (14)	9	5	4	10

Note: Number of animals, in parentheses, was the same for experimental and control groups.

Table 1. The effect of x-ray irradiation on survival of white mice in conditions of general hypoxia

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ACC NR: AP6029426

no protection. No changes were noted in the weight coefficient or size of the adrenal cortex in mice examined one day after 100- and 1000-r irradiation. The 700-r dose produced statistically significant hypertrophy of the cortex and an increase in weight coefficient by the third postirradiation hr, with the weight coefficient reaching twice normal value by the 2nd, 3rd, 4th, 6th, and 10th postirradiation days. A slight decrease in sudanophilic and increase in anisotropic lipoids was observed in the external branches of the fascicular cortical zone in animals examined the first day after 100-r irradiation, compared to a sharp drop in anisotropic lipid content and change in the aggregate lipid state of the protoplasm of the fascicular cells with the 1000-r dose. The 700-r dose produced a gradual decrease in sudanophilic and anisotropic lipid content from the third hr to the fourth day after irradiation when it reached zero, and a sharp increase on the 6th and 10th postirradiation days, thus confirming an increase in functional activity of the adrenal cortex for the first four days after 700-r irradiation. It was concluded from a comparison of data that the increased resistance of irradiated mice to different types of hypoxia is a non-specific reaction effected through the adrenal cortex. Orig. art. has: 1 table. [SW]

SUB CODE: 06/ SUBM DATE: none/ ATD PRESS: 5073

Card 3/3

MEDVEDEV, YU. I.

Call Nr: AF 1108025

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp. Zaslavskiy, I. D. (Leningrad). Some Special Features of Constructive Functions of a Real Variable as Compared With Classical Functions. 181-182

Mention is made of Markov, A. A. and Lipshits.

There are 3 references, 2 of which are USSR, and 1 is English.

Zaslavskiy, I. D. (Leningrad). On the Constructive Dedekind Cuts. 183

There are 2 references 1 of which is USSR, and another English.

Medvedev, Yu. I. (Moscow). On the Concept of Mass Problem and its Application in the Theory of Recursive Functions and Mathematical Logic. 183

Mention is made of Kolomogorov, A. N.

Card 58/80

AUTHOR: Medvedev, Yu. I.

108-13-6-5/11

TITLE: The Experimental Investigation of the Extrapolation Method for the Combating of Pulse-Disturbances in Radio Reception
(Eksperimental'nyye issledovaniya ekstrapolyatsionnogo metoda bor'by s impul'snymi pomekhami pri radioveshchatel'nom priyeme)

PERIODICAL: Radiotekhnika, 1958, Vol 13, Nr 6, pp 52-58 (USSR)

ABSTRACT: One of the methods of combating pulse disturbances in radio receiving sets is based upon the breaking of the contact of the low frequency section during the disturbance or noise. The results obtained by an experimental investigation of this method carried out in 1956-57 by the author are described. First, the method of extrapolation is dealt with, and it is shown that the human auditory organ contains a large number of resonators and therefore extrapolates not only simple sound on the occasion of short interruptions, but also complex sounds like music, speech, etc. The basic wiring circuit for this method is then described. In order to be able successfully to eliminate the disturbance or noise, the low-frequency section of the receiving-set is switched off during the disturbance without the constant current-component of voltage

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The Experimental Investigation of the Extrapolation Method
for the Combating of Pulse-Disturbances in Radio Reception

108-13-6-5/11

being disconnected. Besides, a device is provided for the purpose of switching off the receiving-set at the exact moment at which the disturbance begins. For the purpose of determining the extrapolating capacity of the human auditory organs the following investigations were carried out: 1.) The degree of influence exercised by the duration of single interruptions of sound oscillations during the reproduction of music and speech was determined. No disturbance was found to exist in the signal channel on this occasion. Investigations showed that interruptions occurring during the transmission of music and/or speech are noticeable if their duration is $\tau > 5$ msec. 2.) The degree of influence of interruptions exercised by music and speech at different frequencies of the sequence of interruptions was investigated. Investigations showed that if the frequency of the interruption sequence of sound vibrations (music and/or speech) is increased, interruptions can be observed in a case of a shorter duration. The extrapolation method is investigated by using a linear transformer. This was done in the same order as in the case of no linear transformer being used. The following results were obtained: 1.) During the reproduction of music and/or speech single interruptions become noticeable only if the interruption lasts more than 10 msec. 2.) With

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The Experimental Investigation of the Extrapolation Method
for the Combating of Pulse-Disturbances in Radio Reception

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an increase of the frequency of the interruption sequence for the purpose of conserving the quality of reproduction, the duration of the interruption must be reduced to a considerably lesser extent than if there is no transformer. During tests carried out for the purpose of ascertaining the efficacy of the method under real conditions suppressing of disturbances acting upon the input of the receiving set was investigated. As a result of these investigations it was found that in the case of the action of real pulse-disturbances their number does not exceed 20 to 40 per second, that the quality of the reproduction of music and/or speech is good, and that the noises are practically hardly audible. In the case of disturbances acting with a large number of impulses per second the quality of reproduction deteriorates, but the distinctness of music and/or speech remains good. Summary: 1.) Natural extrapolation accompanied by the use of linear transformers of the signal spectra gives better results in the suppression of disturbances than if no transformer is used. 2.) In natural extrapolation accompanied by the use of linear transformers pulse-disturbances are suppressed with greater success than if disturbances

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The Experimental Investigation of the Extrapolation Method
for the Combating of Pulse-Disturbances in Radio Reception

108-13-6-5/44

are limited. 3.) In consideration of the relatively complex nature of the wiring circuit, the device described here can be recommended for first-class receiving sets as well as for radio-telephone receivers for professional use.

D.G. Ageyev gave the author valuable advice with respect to his work. There are 7 figures, and 4 references, 3 of which are Soviet.

SUBMITTED: July 1, 1957 (initially) and March 3, 1958 (after revision)

1. Radio reception---Noise 2. Noise (Radio)---Analysis

Card 4/4

6.4800

S/058/61/000/005/043/050
A001/A101

AUTHOR: Medvedev, Yu.I.

TITLE: Extrapolation properties of a system of parallel working resonators

PERIODICAL: Referativnyy zhurnal. Fizika, no 5, 1961, 359, abstract 5Zh314
("Tr. Gor'kovsk. politekhn. in-ta", 1960, v 16, no 2, 82 - 96)

TEXT: The author proposes an extrapolation system of parallel working resonance circuits for increasing the efficiency of reception at an extended series of interferences of high "density". The system of circuits will be an extrapolation one only in the case of antiphase connection (coils of circuits with even numbers are connected in antiphase with coils of odd numbers), otherwise the system is functioning as a conventional quadripole. Recommendations are given for designing a practical extrapolation system. /B

[Abstracter's note: Complete translation.]

Card 1/1

30525

S/194/61/000/008/085/092
D201/D304

6.4310

AUTHOR: Medvedev, Yu.I.

TITLE: Extrapolating properties of the system of two resonators operating in parallel

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1961, 8, abstract 3 K48 (Tr. Gor'kovsk. politekh. in-ta, 1960, 16, no. 2, 32-96)

TEXT: The method of interference limiting, consisting of switching off the LP section of the receiver for the time of duration of interference, is well known. In order to increase its effectiveness it is necessary, however, to include an arrangement able to store the information about the signal outside and to reproduce it inside the switching-off period. Such an arrangement may consist of an extrapolating system (S) of two resonators (R) operating in parallel. With the windings of R coils connected in-phase, the resulting phase response of S is a very slowly decreasing function, ✓

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S/194/61/000/008/085/092

D201/D304

Extrapolating properties...

i.e. the S as whole cannot extrapolate the oscillations at the output. The same conclusion may be reached from direct analysis of forced and free oscillations of the S output. With the anti-phase connections (coils of even number R's connected in opposition with coils of odd number R's), the phase response of S is an oscillating function with high decreasing slopes and intersects the abscissa at points which are multiples of the pass band of a single R. It follows that such a system as a whole has extrapolating properties, much better defined than those of a single R. The same result may be obtained from analysis of free and forced oscillations at the S output. The extrapolation time in this case is inversely proportional to the pass-band of a single R. The above analysis was carried out under the following conditions: 1) The resonant frequencies of consecutive R's pass-band staggered; 2) The attenuation coefficients of all R's are equal; 3) The number of R's in the S is high enough. [Abstracter's note: Complete translation]

Card 2/2

ZUBKOV, B.; MEDVEDEV, Yul.; MUSLIN, Ye.; KORNEYEV, S.G., red.; POPOV,
V.N., tekhn. red.

[The ABC's an efficiency promoter] Azbuka ratsionalizatora.
Tambov, Tambovskoe knizhnoe izd-vo, 1963. 348 p.
(MIRA 16:9)

(Technical education)

BOBROV, L.; VASILEVSKIY, V.; VLASOV, L.; DRAGUNOV, E.; KAPUSTINSKAYA, K.;
KARELIN, V.; LOSHCHILOV, G.; MAKARENIA, A.; MEDVEDEV, Yul.;
ROMAN'KOV, Yu.: SENCHENKOVA, T.; SENCHENKOV, A.; TRIFONOV, D.;
ANTOYUK, L., red.; LESHCHINSKAYA, G., tekhn. red.

[Journey into the land of the elements] Puteshestvie v stranu
elementov. [By] L. Bobrov i dr. Moskva, "Molodaia gvardia,"
1963. 366 p. (MIRA 16:10)

(Chemical elements)

MEDVEDEV, Yul.

Flaming merry-go-round. Znan.-sila 38 no.2:1-3 F '63.
(MIRA 16:3)
(Cook ovens)

SOKOLOV, I.Yu.; AYDIN'YAN, N.Kh.; BELEKHOVA, V.N.; BRODSKIY, A.A., starshiy nauchnyy sotrudnik; GLEBOVICH, T.A.; DALMATOVA, T.V.; KOMAROVA, A.I.; KOMAROVA, Z.V.; KOPYLOVA, M.M.; KUDRYAVTSEVA, M.M.; LIBINA, R.I.; LOGINOVA, L.G.; MARGOLIN, L.S.; MARKOVA, A.I.; MEDVEDEV, Yu.L.; MILLER, A.D.; MULIKOVSKAYA, Ye.P.; NECHAYEVA, A.A.; OZEROVA, N.V.; PALKINA, I.M.; PETROPAVLOVSKAYA, L.A.; POPOVA, T.P.; REZNIKOV, A.A.; SERGEYEV, Ye.A.; SETKINA, O.N.; STEPANOV, P.A.; SUVOROVA, Ye.G. [deceased]; SHERGINA, Yu.P.; PANOVA, A.I., red.izd-va; IVANOVA, A.G., tekhn.red.

[Methodological handbook on the determination of microcomponents in natural waters during prospecting for ore deposits] Metodicheskoe rukovodstvo po opredeleniiu mikrokomponentov v prirodnykh vodakh pri poiskakh rudnykh mestorozhdenii. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedr, 1961. 287 p.

(MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii (for Sokolov, Brodskiy, Glebovich, Ozerova, Kudryavtseva, Loginova, Markova, Medvedev, Belekova, Palkina,
(Continued on next card)

SOKOLOV, I.Yu.---(continued) Card 2.

Popova, Petropavlovskaya). 2. Institut geologii rudnykh mesto-
rozhdeniy, petrografii, mineralogii i geokhimii AN SSSR (for
Aydin'yan). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut
metodiki i tekhniki razvedki (for Miller, Sergeyev, Margolin).
4. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut
(for Mulikovskaya, Reznikov). 5. Vsesoyuznyy nauchno-issledova-
tel'skiy institut mineral'nogo syr'ya (for Komarova, A.).
(Prospecting---Geophysical methods)
(Water, Underground---Analysis)

MEDVEDEV, Yu.L.; SOKOLOV, I.Yu., nauchn. red.

[Determination of sodium and potassium ions in natural waters by the method of flame photometry; methodological instructions] Opredelenie ionov natriia i kaliia v prirodnykh vodakh metodom fotometrii plameni; metodicheskie ukazaniia. Moskva, 1962. 16 p. (MIRA 17:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.

MEDVEDEV, Yu.M. (st. Barabinsk)

High operating efficiency of the performance of electric locomotives.
Zhel.dor.transp. 45 no.2:66-68 F '63. (MIRA 16:2)
(Electric locomotives—Performance)

PHASE I BOOK EXPLANATION

SOV/5555

Vsesoyuznyy sovet nauchno-tekhnicheskikh obshchestv

Mezhrastvonnaya borrolye i korroziya metallov v nepryazhennom sostoyanii
(Interstate Corrosion and Stress Corrosion of Metals) Moscow, Mashgiz, 1960.
358 p. 3,000 copies printed.

Ed.: I.A. Levin, Candidate of Technical Sciences; Ed. of Publishing House:
I.I. Kamichenko, Engineer; Technical Editor: V.D. Rikhsid; Managing Ed. for
Literature on Metalworking and Technology: V.Y. Rikhsid; Managing Ed. for
Literature on Mechanical Engineering: I.A. Levin, Candidate of Technical Sciences
(Chairman); V.P. Batrakov, Candidate of Technical Sciences; V.M. Zil'berov,
Candidate of Technical Sciences, and A.V. Turbintsev, Candidate of Technical
Sciences.

PURPOSE: This collection of articles is intended for technical personnel concerned
with problems of corrosion of metals.

CONTENTS: The collection contains discussions of intercrystalline corrosion of
stainless steels and stress corrosion of carbon steels, low-alloy and stainless
steels, and light alloys and nonferrous alloys. The tendency of steels of
various composition and type to corrode under certain conditions is discussed
and the nature of corrosion and corrosion products is analyzed. No personalities
are mentioned. Most of the articles are accompanied by bibliographic references,
the majority of which are Soviet.

II. INTERCRYSTALLINE CORROSION OF STAINLESS STEELS

Chastin, R. I., Candidate of Technical Sciences, S.I. Vol'fson, and Yu. S.
Korotkiy, Engineer. Effect of Slow Heating on the Tendency of Local
Spontaneous Intercrystalline Corrosion

Klimashin, P.P., Candidate of Technical Sciences, and E.F. Iskra,
Junior Scientific Worker. Study of the Tendency of the GKhL29,
Kh-20, and 12Kh9T Types of Chromium-Nickel Steels Toward
Intercrystalline Corrosion

Mezner, B.V., S.A. Jager, and M.M. Furtsger, Candidates of
Technical Sciences. Intercrystalline Corrosion Concentrated
Along the Fusion Line of Welded Joints of the 12-8 Type
Stabilized Steels (Thrift-Type Corrosion)

Loritsin, E.Y., and I.K. Minov. Effect of the Electric Heating
of the 12Kh9T Steel on the Processes Determining Its Resistance
to Intercrystalline Corrosion

Deridzhayeva, Ye. A., Candidate of Technical Sciences, L.P. Kostel',
Engineer, and Ye. I. Uryupko, Candidate of Technical Sciences.
Effect of the Heat Treatment of Some Stainless Steels on Their
Tendency Toward Intercrystalline Corrosion

Pol'ya, M.P., Engineer. Intercrystalline Sea-Water Corrosion of
Austenitic High-Strength Steels

Shwarts, G.I., Candidate of Technical Sciences, and Yu. S. Ruzmatova,
Engineer. Intercrystalline Corrosion and Corrosion Cracking of Stainless
High-Alloy Austenitic Steels

Sedova, Ye. V., Engineer. Tendency of Chromium-Nickel-Molybdenum-Copper
Steels Toward Intercrystalline Corrosion

Bobakov, A.A., Candidate of Technical Sciences. Development of Two-Phase
Stress-Strain Effective Means of Increasing Stainless Steel Resistance to
Intercrystalline Corrosion

Levin, I.A., Candidate of Technical Sciences. Note on the Problem of the
Tendency of Stainless Steel Intercrystalline Corrosion

Voduneyeva, M.A., Engineer, and M.D. Yezhov, Doctor of Chemical Sciences,
Professor. Determining Intercrystalline Corrosion of Chromium-Nickel
Austenitic Steels by Measuring the Internal Friction

Card 4/9

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S/137/61/000/002/014/046
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1961, No. 2, p. 9, # 2B67

AUTHORS: Cheskis, Kh.I., Vol'fson, S.I., Medvedev, Yu.S.

TITLE: The Effect of Extended Heating on the Proneness to Intercrystalline Corrosion of 1X18H9T (1Kh18N9T) Steel

PERIODICAL: V sb. "Mezhkristallitn. korroziya i korroziya metallov v napryazh. sostoyanii", Moscow, Mashgiz, 1960, pp. 27 - 44

TEXT: It is shown that the A-2 test method is completely unsuitable for evaluating the proneness to intercrystalline corrosion of steels, intended for operations at elevated temperatures (550 - 650°C). Impoverishment in Ti and a rise of the quenching temperature from 1,050 to 1,200°C entails increased proneness of 1Kh18N9T steel to intercrystalline corrosion. The introduction of Ti into 18-8 steel does not protect preliminary quenched steel against intercrystalline corrosion after heating at 550-650°C. This is obtained by stabilizing annealing of preliminary quenched 1Kh18N9T steel with a Ti-C ratio as high as 6.2 and more, for 3 hours at 850-870°C. There are 4 references. Yu.S.

Translator's note: This is the full translation of the original Russian abstract.

Card 1/1

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S/129/62/000/002/002/01 -
E111/E435

18 1130

AUTHORS: Gulyayev, A.P., Doctor of Technical Sciences
Medvedev, Yu.S., Engineer

TITLE Stainless chromium-manganese-nickel-nitrogen
stainless steels with titanium, niobium and molybdenum

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov
no.2, 1962, 21-28

TEXT: The properties of chromium-manganese-nickel steels with various carbon, nitrogen, manganese, nickel, titanium, niobium and molybdenum contents were studied. It was considered that the addition of these elements would reduce the susceptibility of the steel to intergranular corrosion. The range of compositions (%) of the steels studied was: 0.03 to 0.963 C; 0.10 to 0.42 N; 16.15 to 18.67 Cr; 4.06 to 6.67 Ni; 6.3 to 10.9 Mn; 0 to 2.0 Nb; three heats also contained 0.56% Ti and 1.92 to 3.0% Mo but no niobium. The steels were melted in 40 kg induction furnaces from pure materials, nitrogen being introduced as 1% N ferrochromium, 4-8% N manganese. Heats were poured into square ingots being separately alloyed with the other elements. Specimens were made.
Card 1/4

Stainless chromium-manganese

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E111/E435

from 4 mm thick sheets prepared by rolling at a starting temperature of 1150 - 1180°C and water quenching from 1050°C. All the steels studied belong to the austenitic or austenitic-ferritic class of stainless steels. The amount of delta ferrite was determined by means of metallographic and magnetic measurements. It was found only in steels with over 0.2% N (with 0.25 and 0.41% N respectively). The effect of plastic deformation to give 5, 10, 15 and 20% residual deformation on the test steels was studied and compared with the effect on two compositions of type 1X18H9T (1Kh18N9T) steels. In the 1X18H9T deformation martensite was produced but not in the chromium-manganese nickel steels whatever their nitrogen, carbon, niobium and titanium contents. The influence of prolonged heating (100, 350, 600, 650, 700°C up to 4000 hours) on the structure and toughness of the steels was studied on hardened non standard 40 x 5 x 3 mm specimens with a notch 1.5 mm deep and 0.25 mm radius of curvature. At all holding temperatures above 450°C the toughness of Cr-Mn-Ni-N steels fell, the fall being the greater the higher the temperature. The fall is due to precipitation of

Card 2/4

Stainless chromium-manganese-

S/129/62/000/002/002/014
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carbides or carbonitrides at grain boundaries. It is known that austenitic nitrogen-containing chromium-manganese-nickel steel becomes liable to intergranular corrosion after holding at 425 to 815°C, the most widely-held explanation is that this is due to precipitation of chromium carbides and nitrides. There is little published information on the effect of niobium content while that on the effect of niobium is contradictory. The authors have studied the effect of carbon, nitrogen, nickel, manganese, niobium, titanium and molybdenum, and also of stabilizing annealing on the liability of the Cr-Mn-Ni-N steels to intergranular corrosion at 450 to 750°C and holding times up to 1000 - 4000 hours. The standard AM TOCT6032-58 (AM GOST 6032-58) method was used. Boiling time was 48 hours, intergranular corrosion being determined from the appearance of cracks on bending the specimens. It was found that the steels (which are of the X17H4A8 (Kh17N4AG8) type) become liable to intergranular corrosion when heated to 450 - 800°C and are thus unsuitable for service in this range. All austenite-forming elements (carbon, nitrogen, nickel and manganese) increase this tendency. Niobium and titanium

Card 3/4

Stainless chromium-manganese

S/129/62/000/002/002/014
E111/E435

increase resistance to intercrystalline corrosion but stabilization of the steels of the type tested by adding these elements is not sufficiently effective since, to prevent formation of delta ferrite, the addition of those elements must be accompanied by an increase in the content of the austenite-forming elements (which have the opposite effect). Alloying with molybdenum, which raises the temperature range in which intergranular corrosion develops is a promising approach for the test steels which can then be used up to 550-600°C. There are 5 figures and 1 table

ASSOCIATION TsNIICM Giprofte mash

Card 4/4

GULYAYEV, A.P., doktor tekhn.nauk, prof.; MEDVEDEV, Yu.S., inzh.

Structure and stability of austenite in chromium-manganese-nickel
steels with nitrogen. Metalloved. i term. obr. met. no.1:35-39
Ja '63. (MIRA 16:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii i Gosudarstvennyy nauchno-issledovatel'skiy i
proyektnyy institut neftyanogo mashinostroyeniya.
(Chromium-manganese steel--Testing)
(Phase rule and equilibrium)

MEDVEDEV, Yu.S.

Steels with a low nickel content for equipment in petroleum refineries. Mash. i neft. obor. no.4:23-27 '63. (MIRA 17:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut neftyanogo mashinostroyeniya.

MEDVEDEV, Yu.S.; TOMILINA, T.D.

Testing the stability of stainless steel austenite with a device
with pondermotive action. Zav.lab. 30 no.3:314 '64.

(MIRA 17:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut
neftyanogo mashinostroyeniya.

1021-2237, 11-12
 math
 [Lobachev, Yu. T. Generalization of a theorem of F. Riesz. *Matemat. Statist. Nauk* (N.S.), no. 6(58), 116-118 (1953). (Russian)]
 F. Riesz [Riesz and Nagy, *Leçons d'analyse fonctionnelle*, Acad. Klado, Budapest, 1952, p. 75; these Rev. 14, 286; Riesz, *Math. Ann.* 69, 449-497 (1910)] gave a condition necessary and sufficient that a function on a closed interval be the indefinite integral of a function in L_p , $p > 1$. This note extends this theorem to the spaces L_M of Birnbaum and Orlicz [*Studia Math.* 3, 1-67 (1931)], when $M(u)/u \rightarrow \infty$ as $u \rightarrow \infty$.
 M. M. Day (Urbana, Ill.).

MEDVEDEV, Yu. T.

Mathematical Reviews
Vol. 14 No. 11
Dec. 1958
Analysis

(Medvedev, Yu. T. Two criteria of compactness of families of functions. Doklady Akad. Nauk SSSR (N.S.) 90, 337-340 (1953). (Russian)

Theorem 1. Suppose X and Y are non-empty sets, M is a totally bounded metric space, and ϕ maps $X \times Y$ into M . Let $F = \{f_y : y \in Y\}$ and $G = \{g_x : x \in X\}$, where $f_y = \phi(x, y) | x \in X$ and $g_x = \phi(x, y) | y \in Y$. Then (with the usual metrization) F is totally bounded if and only if G is totally bounded. By suitable specialization this yields the classical theorem of Arzelà.

Theorem 2. Suppose X is a measurable subset of Euclidean space, with $mX < \infty$, and F is a set of measurable real functions on X . Then F is (relatively) compact with respect to convergence in measure if and only if for each $\epsilon > 0$ there is a transformation $f \mapsto f_\epsilon$ of F into the space CX of bounded continuous real functions on X such that $\{f_\epsilon : f \in F\}$ is relatively compact and $m\{x : f_\epsilon(x) \neq f(x)\} < \epsilon$ for each $f \in F$.

V. L. Klee (Seattle, Wash.).

Voronezh State U.

MEDVEDEV, Yu. T.

MEDVEDEV, Yu. T. - "The degree of difficulty of mass problems". Moscow, 1955
Moscow Order of Lenin and Order of Labor Red Banner State University M. V.
Lomonosov. (Dissertation for the Degree of Candidate of Physicomathematical
Sciences.)

SO: Knizhnaya Letopis' No 46, 12 November 1955. Moscow

Medvedev, Yu. T.

USGR/ Mathematics - A and B sets

Card 1/1 Pub. 22 - 5/59

Authors : Medvedev, Yu. T.

Title : ~~Mathematics~~
About non-isomorphous recursively - countable sets

Periodical : Dok. AN SSSR 102/2, 211 - 214, May 11, 1955

Abstract : A series of theorems is presented for the purpose of answering the question, raised by academician A. N. Kolmogorov, how rich could a class of paired nonisomorphous A-sets be if neither one of them is a set B(isomorphous set). Three references: 1 Germ. and 2 USA (1938-1944).

Institution :

Presented by : Academician A. N. Kolmogorov, January 13, 1955

Medvedev, Yu. T.

Medvedev, Yu. T. Degrees of difficulty of the mass problem. *Izv. Akad. Nauk SSSR (N.S.)* 104 (1958), 501-504. (Russian)

Any mathematical task whose achievement can be resolved into an infinite sequence of elementary acts whose results can each be characterized by a natural number is a mass problem. Arithmetically speaking, a mass problem is the task of "constructing certain functions (with natural numbers as values and arguments) having a given property." A given mass problem A is completely determined and is completely determined by its set of solving functions $\{f\}$ and we write $A = \{f\}$. The null class of functions is associated with an improper or absolutely unsolvable problem; a problem is called algorithmically solvable if at least one of its solving functions is general recursive. A problem $B = \{g\}$ reduces to a problem $A = \{f\}$ if there is a partial recursive operation $R(\delta)$ carrying each function f in A into some function g in B . Two problems are called equivalent if each reduces to the other. The collection of problems equivalent to a given problem A is called the degree of difficulty $|A|$ of A . Write $a \leq b$ if and only if any problem with degree of difficulty b is reduced to a problem with degree of difficulty a . The collection Ω of degrees of difficulty is a complete distributive lattice for meet, ab , and join avb .

Melvin, Yu. T.

suitably defined. The operation $a \circ b$ is defined as the least c such that $a \leq c \leq b$. For a fixed segment $0 \leq x \leq a$ of Ω we define $\bar{x} = x \circ a$. We interpret $\vdash X$ if X is in Ω to mean that the problem having degree of difficulty X is solvable. Then all axioms and rules of the intuitionistic propositional logic are satisfied by the elements of an arbitrary segment $0 \leq x \leq a$ of Ω . This is related to a result of A. N.

Kolmogorov [Math. Z. 35 (1932), 58-65]. There follows a list of results concerning problems of solvability and enumerability related to S. C. Kleene and E. L. Post, Ann. of Math. (2) 59 (1954), 379-407 (MR 15, 772).

Errata: Page 502, line -11, should read $\vdash((a \circ b) \wedge (b \circ c)) \supset (a \circ c)$; page 502, line -4, first formula, should read $\vdash((a \circ b) \wedge (b \circ c)) \supset (a \circ c)$; page 502, last line, should read $\vdash((a \circ b) \wedge (b \circ c)) \supset a$.

E. J. Ogden (Hanover, N.H.).

$\frac{2}{2}$

RM

MEDVEDEV, YU. T.

"On a Class of Events Which Can be Represented in a Finite Automation,"
Avtomaty. Sbornik statey /Automata. Collected Articles/, IL /Publishing
House for Foreign Literature/, Moscow, 1956, Pages 385 - 401.

MEDVEDEV, Yu. T.

MENZEL, Donald H., red.; KAZARNOVSKIY, M.V. [translator]; TIKHOMIROV, F.A. [translator]; ARNOL'D, N.A. [translator]; PETRUKHIN, V.I. [translator]; MATSONASHVILI, B.N. [translator]; AKSENOV, S.I. [translator]; BAKANOV, S.P. [translator]; SHAPIRO, I.S., red.; ADIROVICH, E.I., red.; MEDVEDEV, Yu.T., red.; MAKHIMSON, I.G., red.; TELESNIN, N.L., red.; BELEVA, M.A., tekhn.red.

[Fundamental formulas of physics. Translated from the English]
Osnovnye formuly fiziki. Moskva, Izd-vo inostr. lit-ry, 1957.
657 p. (MIRA 11:5)

(Mathematical physics)

MEDVEDEV, YU. T.

"On Representation of Occurrences in Automata" (12 October 1956).

Paper presented at the Seminars on Cybernetics at Moscow University during the 1956-57 school year.

Problemy Kibernetiki, No. 1, 1958

S/020/63/148/004/006/025
B172/B180

AUTHOR: Medvedev, Yu. T.

TITLE: Interpretation of logical formulas by finite problems and its relation to the representability theory

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 4, 1963, 771 - 774

TEXT: This is a continuation of a former paper (DAN, 142, no. 5, (1962), 1015). Two theorems are first formulated which, together with former results, lead to the following statement: For those formulas of Heyting's calculus H which contain none of the symbols $\neg$, $\vee$, and $\supset$, the general validity is equivalent to the derivability in H . A number of auxiliary theorems are used to prove two more theorems showing that this statement remains valid if the general validity is replaced by the representability in the sense of S. C. Kleene and G. F. Rose.

ASSOCIATION: Matematicheskiy institut im. V. A. Steklova Akademii nauk SSSR
(Institute of Mathematics imeni V. A. Steklov of the Academy of Sciences USSR)

Card 1/2

34818

S/020/62/142/005/007/022
B112/B102

16.0200

AUTHOR: Medvedev, Yu. T.

TITLE: Finite problems

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 5, 1962, 1015-1018

TEXT: The author considers a "positive" enumeration π which is described by the following axioms:

- | | |
|--|---|
| 1. $x \supset (y \supset x)$. | 5. $(x \& y) \supset y$. |
| 2. $(x \supset (y \supset z)) \supset ((x \supset y) \supset (x \supset z))$. | 6. $x \supset (x \vee y)$. |
| 3. $x \supset (y \supset (x \& y))$. | 7. $y \supset (x \vee y)$. |
| 4. $(x \& y) \supset x$. | 8. $(x \supset z) \supset ((y \supset z) \supset ((x \vee y) \supset z))$ |

A problem is said to be finite if its solution is contained in a finite set of admissible possibilities. A formula $U(\alpha_1, \dots, \alpha_m)$ is said to be solvable without limitation if it is solvable for all the problems $\alpha_1, \dots, \alpha_m$ whose sets of admissible possibilities are known. It is demonstrated that each formula of π which is solvable without limitation

Card 1/2

Finite problems

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B112/B102

can be derived in π . There are 8 references: 2 Soviet and 6 non-Soviet. The three references to English-language publications read as follows: J. C. C. Mc Kinsey, A. Tarski, J. Symbolic Logic, 13, 1 (1948); Gene F. Rose, Trans. Am. Math. Soc., 75, No. 1, 1 (1953); S. C. Kleene, J. Symbolic Logic, 10, 109 (1945). 4

ASSOCIATION: Matematicheskii institut im. V. A. Steklova Akademii nauk SSSR (Mathematical Institute imeni V. A. Steklov of the Academy of Sciences USSR)

PRESENTED: October 17, 1961, by A. N. Kolmogorov, Academician

SUBMITTED: October 16, 1961

Card 2/2

Country : USSR M
CATEGORY : Cultivated Plants. Grains.
ABS. JOUR. : RZSlo1., No. 21, 1956, No. 95904
AUTHOR : Medvedev, Yu. V.
INST. : ~~Dzhgorod Univ.~~
TITLE : The Planting of Winter Cereals and Oats on
Growing Alfalfa of Several Years Standing
Without Using Nitrogen Fertilizers
ORIG. PUB. : Dokl. i soobshch. Dzhgorodsk. un-t, 1957,
No. 1, 16-18.
ABSTRACT : No abstract

CARD: 1/1

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R93379

МЕДВЕДЕВ, Ю. В.

YU. V. MEDVEDEV

Opyt Raboty Gruzovykh sudov po raspisaniyu Work schedules of
freighter, by P. V. Pustovoy I Pustovoy, Pavel Vanifat'yevich
Moskva "Morskoy Transposrt", 1956.

85 p. illusl, diagrs., tables. (Biblioteka Obmena Opytom na
Morskom Transporte)

KIRDAN, Ivan Lukich, kapitan dal'nego plavaniya, inzhener; MEDVEDEV, Vasilii Fedorovich; MEDVEDEV, Yuriy Vladimirovich; PETROW, Mikhail Kliment'yevich; SHISHOV, Boris Nikolayevich[deceased]; MELIDOVA, E.S., redakter; VOLKOVA, Ye., tekhnicheskiiy redakter.

[Seamanship] Morskaya praktika. Pod obshchei red. I.L.Kirdana. Moskva, Izd-vo "Morskoj transport", Pt.1. 1955. 462 p.
(Seamanship) (MLBA 9:5)

PUSTOVOY, Pavel Vanifat'yevich; ~~MEDVEDEV~~ Yuriy Vladimirovich; SEMENOVA,
M.M., redakter; LAVRENOVA, N.B., tekhnicheskii redaktor

[Operation of cargo ships on a time schedule] Opyt raboty gruzovykh
sudov po raspisaniyu. Moskva, Izd-vo "Morskoi transport," 1956.
85 p. (MLRA 10:1)

(Merchant marine)

POVALYAYEV, Nikolay Ivanovich; MEDVEDEV, Yu.Ya., red.; IVANOV, K.A., red. izd-va,
LAVRENOVA, N.B., tekhn. red.

[Operational indices for the merchant marine] Eksploatatsionnye
pokazatel i izmeriteli raboty morskogo transportnogo flota.
Moskva, Izd-vo "Morskoi transport," 1958. 81 p. (Ekonomika i
eksploatatsiia morskogo transporta) (MIRA 11:12)
(Shipping)

MEDVEDEV, Yuriy Vladimirovich; SKOBEL'NO, L.V., red.; SARAYEV, B.A..
tekhn.red.

[Mechanically operated hatchway covers] Mekhanizirovannyye
liukovye zakrytiya. Moskva, Izd-vo "Morskoi transport," 1960.
123 p. (MIRA 14:3)
(Ships--Equipment and supplies)

BARDA-SKLYARENKO, Vsevolod Tarasovich; MEDEV, Yu.V. red.; KRUG-
LOVA, Ye.M., red. izd-vs; LAVRENOVA, N.B., tekhn. red.

[Freight transportation in sealed holds] Perevozka грузов
v oplombirovannykh triumakh. Moskva, Izd-vo "Morskoj tran-
sport," 1961. 40 p. (MIRA 14:5)
(Freighters) (Cargo handling)

IVANOV, V.S.; MEDVEDEV, Yu.V.; VASILENKO, V.F.; BREGER, A.Kh.;
OSIPOV, V.B.; GOL'DIN, V.A.

Studies in radiation polymerization. Part 2: Radiation polymerization
of piperylene. Vysokom.soed. 5 no.8:1255-1262 Ag '63.
(MIRA 16:9)

1. Leningradskiy gosudarstvennyy universitet i Fiziko-
khimicheskiy institut imeni L.Ya.Karpova.
(Piperylene) (Polymerization) (Radiation)

ACCESSION NR: AP4037271

8/0190/64/006/005/0782/0786

AUTHORS: Ivanov, V. S.; Sukhikh, T. A.; Medvedev, Yu. V.; Breger, A. Kh.;
Osipov, V. B.; Gol'din, V. A.

TITLE: Studies in radiation polymerization. 3. Radiation polymerization of
piperylene in channel complexes of urea

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 5, 1964, 782-786

TOPIC TAGS: piperylene polymerization, urea clathrate complex, endocytic
clathrate component, channel polymerization, tube structure, trans piperylene
polymer

ABSTRACT: Urea clathrate complexes with piperylene as endocytic component were
prepared by mixing 1 gm urea with 0.001-- 0.1 ml methanol, cooling in a glass
ampule to -78C, and adding 1-3.7 moles of cooled piperylene per mole of urea. The
polymerization of piperylene was achieved by γ -irradiation with Co⁶⁰. Parallel
studies on block-polymerization of piperylene were conducted at -78C with irradiation
doses of 30 Mrad. After 2 to 6 weeks at -78 to -45C, the residual piperylene
monomer was removed by means of a vacuum pump. The urea was then dissolved in 10%
acetone, leaving polymers whose specific viscosity, degree of unsaturation, and

Card 1/2

ACCESSION NR: AP4037271

infrared spectra were recorded. It was found that in channel polymerization an optimal yield of the polymer (66%) was obtained at a methanol content of 0.001 ml per 1 gm urea and at a molar ratio of the monomer to urea of 1:(3.5-3.7). The yield was considerably higher than in block polymerization. The infrared spectra of the channel polypiperylene in CCl_4 revealed the presence of only the 1,4-trans configuration (at 968 cm^{-1}), while the block-polymerized polymer contained the trans- as well as the cis form. Orig. art. has: 2 tables and 1 chart.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University); Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physicochemical Institute)

SUBMITTED: 07May63

DATE ACQ. 09Jun64

ENCL: 00

SUB CODE: MT

NO REF SOV: 005

OTHER: 010

Card 2/2

IVANOV, V.S.; MEDVEDEV, Yu.V.; KHOU GUY [Hou Kuei]; TARAN, A.A.

Radiolysis of some conjugated dienes. Zhur. ob. khim. 34 no.11:
3853 N '64 (MIRA 18:1)

1. Leningradskiy gosudarstvennyy universitet.

L 7875-66 EWT(m)/EPF(c)/EWP(j)/EWA(h)/EWA(1) RM

ACC NR: AP5025035

SOURCE CODE: UR/0286/65/000/016/0084/0084

AUTHORS: Madvedev, Yu. V.; Ivanov, V. S.; Ivanova, L. I.; Breger, A. Kh.; Osipov, V. B.; Gol'din, V. A.

ORG: none

TITLE: Method for obtaining polychloroprene. Class 39, No. 173947

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 84

TOPIC TAGS: rubber, chloroprene, polychloroprene, polymer, *polymerization*

ABSTRACT: This Author Certificate presents a method for obtaining polychloroprene by polymerization of chloroprene under the influence of γ -radiation. To regulate the molecular weight and structure of the polymer, the polymerization is carried out in the presence of amine and phenol type stabilizers.

SUB CODE: 07/

SUBM DATE: 12Feb62

nw

Card 1/1

UDO: 678.765.2.002.2

L 27191-65 EMT(m)/EPT(c)/EMP(j)/T/EWA(c) Po-4/Pr-4 RPL RM/JW
 S/0190/65/007/002/0193/0198
 ACCESSION NR: A25005585

AUTHOR: Ivanov, V. S.; Mamtszak, M.; Medvedev, Yu. V.; Levando, L. K. 31

TITLE: Polymerization of N-phenylimide 24
 6

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 7, no. 2, 1965, 193-198

TOPIC TAGS: N phenylimide, poly N phenylimide, polyimide, polymer, polymerization

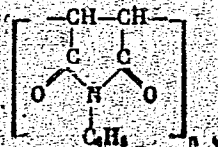
ABSTRACT: A study has been made of 1) the radiation-induced or 2) azobisisobutyronitrile-initiated synthesis of poly-N-phenylmaleimide from N-phenylmaleimide. It is noted that polyimides are of interest owing to their high thermal stability and good electrical, physical, and mechanical properties. In case (1), the radiation source was Co^{60} , and the monomer was either in the solid or the liquid state. The effects of the radiation dose, dose rate, temperature, ambient atmosphere, and additives were studied. The results are given in plots and tables. Trichloroacetic acid and a CO_2 atmosphere promoted the reaction, and air inhibited it. In case (2), polymerization was carried out successfully in benzene solution at 60--70C or in bulk at 94--96C. The intrinsic viscosity, softening point (300--325C), decomposition temperature (370--400C), solubility, and IR spectra were measured for the polymers, and x-ray structural analysis was conducted. The polymer microstructure was found

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L 27191-65

ACCESSION NR: AP5005585

to be the same in cases (1) and (2). Polymerization was shown to proceed via the C=C Bond of the imide ring to form the following structure:



Orig. art. has: 4 figures, 1 table, and 1 formula.

[SM]

ASSOCIATION: Leningradskiy gosudarstvennyy universitet (Leningrad State University)

SUBMITTED: 09Dec63

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 009

OTHER: 020

ATD PRESS: 3191

Card 2/2

IVANOV, V.S.; MEDVEDEV, Yu.V.; IVANOVA, L.I.

Radiation-induced polymerization. Part 6. Radiation polymerization
of chloroprene. Vest.LGU 20 no.22:154-164 '65.

(MIRA 18:12)

L 17094-63 EPR/EWP(j)/EPF(c)/EWT(m)/EDS AFETG/ASD Pa-4/PC-4/Pr-4
 ACCESSION NR: AP3004711 RM/WW/AR S/0190/63/005/008/1255/1262

AUTHORS: Ivanov, V. S.; Medvedev, Yu. V.; Vasilenko, V. F.; Breger, A. Kh.; 77
 Osipov, V. B.; Gol'din, V. A. 77

TITLE: Studies in radiation polymerization. 2. The radiation polymerization of
 piperylene 19

SOURCE: Vyssokomolekulyarnyye soyedineniya, v. 5, no. 8, 1963, 1255-1262

TOPIC TAGS: radiation polymerization, piperylene, radiolysis, Co⁶⁰, carbon
 tetrachloride, argon, krypton

ABSTRACT: Samples of piperylene monomer were placed in sealed glass ampules in an
 atmosphere of nitrogen, argon, or krypton, and subjected to gamma-irradiation by
 means of a Co⁶⁰ installation. Following absorption of doses from 1 to 160 Mr, the
 ampules were opened, the gases subjected to chromatographic study. The obtained
 polymer was analyzed for viscosity and degree of unsaturation, and was studied
 by infrared spectroscopy. The gaseous products of radiolysis contained hydrogen,
 methane, ethylene, acetylene, divinyl and 98.5% piperylene. The degree of un-
 saturation of the polymer amounted to 84 and 87% for samples receiving 80 and 160
 Mr respectively. It was found that the yield of the polymer increased with the

Card 1/2

L 17094-63

ACCESSION NR: AP3004711

2

irradiation dose and that the presence of nitrogen, argon, and krypton exerted a sensitizing effect on radiation polymerization. Infrared spectroscopy revealed that the structure of the polypiperylene consisted mainly of 1,4-trans chains, 1,2-trans chains, or of their combination, while the amount of cis-configurations had decreased trifold. It is concluded that in radiolysis the main line of cleavage of the piperylene molecule consists in the severance of the single bond between the fourth and fifth carbon atoms. The authors are deeply grateful to N. I. Leonova for assistance in infrared spectroscopy. Orig. art. has: 1 table, 2 charts, and 14 formulas.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet fiziko-khimicheskiy institut im. L. Ya. Karpova (Leningrad State University, Physical-Chemical Institute)

SUBMITTED: 12Feb62

DATE ACQ: 28Aug63

ENCL: 00

SUB CODE: CH

NO REF SOV: 008

OTHER: 023

Card 2/2

IVANOV, V.S.; SUKHIKH, T.A.; MEDVEDEV, Yu.V.; BREGER, A.Kh.; OSIPOV, V.B.; GOL'DIN, V.A.

Studies in radiation polymerization. Part 3: Radiation polymerization of piperylene in the channel complexon of urea. Vysokom. soed. 6 no. 5:782-780 My '64. (MIRA 17:6)

1. Leningradskiy gosudarstvennyy univeritet i Fiziko-khimicheskiy institut imeni Karpova, Leningrad.

CA

110

Significance of photoenergy and carotenoids in sexual
and asexual reproduction in plant life. P. M. Zhakovskii
and Zh. Medvedev. *Ljebki Sverennoi* *Bot.* 26.
50. 14-1948). - A review with 30 references. J. E. S.

MEDVEDEV, ZH. A.

USDA/Medicine - Carotene

Oct 49

"The Formation of Carotene and Carotenoids in Bacteria and Fungi," Zh. A. Medvedev

"Prilozh" No 10, pp 58, 59

Studies conducted to det subject problem. In Algae which were raised on an artificial nutrient medium, carotenoids were observed only in the fertile strains. Mycobacterium phlei cultured on an artificial medium accumulated gamma- and beta-carotene, cryptoxanthene asaphrin and zeaxanthene. It is interesting to note that in cultivating

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mycobacteria, under conditions where petrolatum or kerosene were the only source of carbon, there was a very intensive accumulation of carotenoids.

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PROCESSING AND PROPERTY INDEX																									
PA Extraplasmic carotenoids and sporogenesis. P. M. Zhukovskii and Zh. Melyedyev. <i>Doklady Akad. Nauk S.S.S.R.</i> 64, 141-4 (1949); cf. <i>Uspehi Sovremennoi Biol.</i> 1948, No. 4. The dependence of sporogenesis on carotenoids is confirmed. The interaction of the sporogenic tissues with extraplasmic carotenoids dissolved in fat droplets has been observed at all stages of growth in a variety of spore-bearing plants. These droplets are readily observed in all specimens, although some carotenoids are also found in the cell juices and in intercellular passages. Careful pressing (up to 30 atm.) and centrifuging allows a sepn. of the intercellular fluids and the cell juices without damage to the cells. The specimens taken from <i>Glaucium flammula</i> yield an emulsion the fat phase of which has up to 300 mg. /100 g. of carotene. The highest value found so far is 400 mg. /100 g. in <i>Verbascum orientale</i>. G. M. Kosolapoff Moscow Agric. Acad. in. Timiryazev. All-Union Acad. Agric. Sci. in. Lenin ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION																									
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11d

CA

PROCESSES AND PROPERTIES INDEX

The connection of generative functions of plants with carotenoids. P. M. Zhukovskii and Zh. Medvedev. *Doklady Akad. Nauk S.S.S.R.* 66, 985-7(1949). Chromatographic analysis was used to follow carotene derivs. during growth cycle of plants, using anthers and petals, in Calif. poppy, jasmine, squash, and St. John's wort. In the anthers the level of carotene and phytoalexin rises steadily through budding and culminates in high values during flowering. A similar result is observed in the petal from beginning of budding until falling of petals. Attempts to grow pollen of *Ginkgo biloba* in artificial media failed; it can be grown only in the fluid exuded by the reproductive organs of the plant. G. M. Kosolapoff

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

11D

Physico-chemical dimorphism of diclinous plants and the problem of sex. Zh. A. Medvedev, Doklady Akad. Nauk SSSR 68, 777-780 (1970). Detn. of pH and rH of microspores of a variety of plants showed that in diclinous plants the dimorphism is readily shown by approx. 50-50 division into acidity groups (about 5.5-6.0 and 6.5-7.5 pH groups) within the same specimen. In hermaphroditic plants the early dimorphism is succeeded by a leveling achieved in mature specimens. The reducing activity is generally higher in female plants, hence the "male" pollen is characterized by high rH and higher pH values. In hermaphroditic and monoclinal plants the time of sex detn. is shifted to later period of ontogenesis in comparison with diclinous plants. G. M. Kosolapoff

Comparative physicochemical study of microsporo-
genesis of hermaphroditic and dioecious plants. Zh. A.
Medvedev, Doklady Akad. Nauk S.S.S.R. 68, 657 (to
1949); cf. ibid. 68, 777 (1949).—In *Cannabis sativa*,
Humulus lupulus, and *Asparagus officinalis*, the anthers
in the early stages of microspore development give a pre-
dominantly alk. reaction (pH 7.2-7.0), while the pollen
which had matured the majority of the grains have pH
values of 5.5-6.5 in the 1st 2 plants and 6.5-7.2 in the 3rd
instance. A considerable spread of the pH values of pollen
exists at all stages of growth, but the movement toward
lower pH values is apparent. Hermaphrodite plants
(*Lamium album*, *Clematis integrifolia*, and *Lupinus poly-
phyllus*) have a similar pH shift of pollen, but the initial
values show a wider spread than shown by the dioecious
plant pollen. The cause of dimorphism of pollen in both
types of plants is possibly related to such pH variations,
since the tetrads of *Typha latifolia* show different pH
variations with growth among the microspores present
during the development (usually, 2 begin to show higher
pH much earlier than others; the condition is equilibrated
at maturity). In the dioecious plants the correlation of
physicochem. properties of microspores depends on other
factors as well, such as the environment of the particular
flower; thus, *Melandrium rubrum* grown in shade and high
humidity gives 8.0-9.0; predominance of the "female"
characteristics: more acid reaction and larger size of the
spores.

G. M. Kosolapoff

MEDVEDEV, Zh. A.

"Physiological Nature of the Formation of Sexual Features in Higher Plants." Thesis for degree of Cand. Biological Sci. Sub 1 Dec 50, Inst of Plant Physiology Acad Sci USSR.

~~1950~~ Summary 71, 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva, Jan-Dec 1950.

MEDVEDEV, ZH. A.

Problem of auto-restoration and ageing of intracellular proteins.
Usp. sovrem. biol. 33 no.2:202-207 Mar-Apr 1952. (CML 22:2)

1. Moscow.

MEDVEDEV, Zh.A.

A. V. Nagorny's theory on aging of the organism. *Fiziol. zh. SSSR*
38 no.4:523-529 July-Aug 1952. (CML 23:2)

1. Moscow.

MEDVEDEV, Zh.A.

The diketopiperazine theory of protein structure; a discussion. Bio-
khimiya 18, 248-53 '53. (MLRA 6:4)
(CA 47 no.16:8133 '53)

MEDVEDEV, Zh.A.

Biochemical rules of growth, aging, and restoration of cellular forms of live substance. Usp. sovrem. biol. 35 no.3:338-356 May-June 1953.

(CML 25:1)

1. Moscow.

MEDVEDEV, Zh. A.

vol. 40
Apr. 10, 1954
Biological Chemistry

①
Biochemical principles of growth, aging, and restoration of
cell form in living matter. Zh. A. Medvedev. *Uspekhi*
Sovremennoi Biol. 36, 338-60 (1953).—A review with 78 ref-
erences.
Julian F. Smith.

MEDVEDEV, Zh. A.

Nervous System

Role of the nervous system in the aging process of an organism.
Priroda 42 no. 3, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

MEDVEDEV Zh.A.
EXCERPTA MEDICA Sec.2 Vol.9/10 Physiology, etc. Oct56

4518. MEDVEDEV Zh.A. Moscow. *The problem of reproduction of the specificity of proteins in biosynthesis. Accomplishments of contemporary biochemistry (Russian text) USP. SOVR. BIOL. 1955, 40/2 (159-178) Tables 1

A review. The nature of the reactions producing peptide bonds has not yet been elucidated. It is possible that the same enzyme can hydrolyse and resynthesize the same protein. Bresler and co-workers were able to resynthesize the same protein from its hydrolysates in the presence of a hydrolysing enzyme, e.g. pepsin, under high pressure. There are indications that various compounds containing P (nucleic acids) can act as promoters in the formation of peptide bonds. Resynthesis of proteins can be effected from single amino-acids, peptides and even polypeptides. The mechanism of reproduction of the specific proteins is not known.

Tolstouhov - New York, N. Y.

NIH Trans. available in /M